

AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph beginning on page 32, line 7 and ending on page 35, line 2.

The substituent groups on R¹ and R² include, ~~but are not limited to,~~ hydrogen atom, halogen atom, hydroxyl group, lower alkyl group, lower alkenyl group, lower alkynyl group, lower alkoxy group, lower thioalkoxy group, hydroxy lower thioalkoxy group, arylthio group, heteroaryl thio group, heteroaryl(hydroxy)alkyl group, halogenated lower alkyl group, hydroxy lower alkyl group, dihydroxy lower alkyl group, halogenated(hydroxy)lower alkyl group, hydroxyalkenyl group, hydroxyalkynyl group, hydroxy lower cycloalkenyl group, lower alkoxy(hydroxy)alkyl group, lower alkoxy(hydroxy)alkoxy group, lower alkoxy alkyl group, lower alkoxy alkoxy group, lower thioalkoxy alkoxy group, lower alkyl sulfonyl alkoxy group, hydroxy lower alkoxy group, dihydroxy lower alkoxy group, hydroxy lower alkyl alkoxy group, hydroxy imino lower alkyl group, lower cycloalkyl(hydroxy)alkyl group, aralkyl group, hydroxyaralkyl group, cyano group, cyano lower alkyl group, amide group, N-lower alkyl amide group, N-lower cycloalkyl amide group, N,N-di-lower alkyl amide group, N-hydroxy lower alkyl amide group, N-hydroxy lower alkyl-N-lower alkyl amide group, N-aryl amide group, cyclic aminocarbonyl group, carbamoyl group, N-lower alkyl

carbamoyl group, N,N-di-lower alkyl carbamoyl group, aminosulfonyl group, cyclic aminosulfonyl group, N-lower alkyl aminosulfonyl group, N-lower cycloalkyl aminosulfonyl group, N,N-di-lower alkyl aminosulfonyl group, N-hydroxy lower alkyl aminosulfonyl group, N-lower alkoxy alkyl aminosulfonyl group, N-halogenated lower alkyl sulfonyl group, pyrrolidinyl sulfonyl group, lower alkyl sulfonyl amino alkyl group, N-lower alkyl aminosulfonyl alkyl group, N,N-di-lower alkyl aminosulfonyl alkyl group, lower acyl group, lower acyl alkyl group, lower cycloalkyl(hydroxy)methyl group, tetrahydropyranyl group, hydroxytetrahydropyranyl group, hydroxy lower alkyl tetrahydropyranyl group, lower acyl amino alkyl group, (thiazole-2-yl)hydroxymethyl group, di(thiazole-2-yl)hydroxymethyl group, lower alkyl sulfonyl group, lower alkoxy alkyl sulfonyl group, hydroxy lower alkyl sulfonyl group, lower alkyl sulfonyl alkyl group, N-lower alkyl amide alkyl group, aryl group, aralkyl group, heteroaryl group, heteroaryl lower alkyl group, heteroaryl lower alkoxy group, heteroaryl sulfonyl group, 4-morpholinyl sulfonyl group, 4-oxythiomorpholinyl sulfonyl group, 4-dioxythiomorpholinyl sulfonyl group, 4-morpholinyl sulfonyl group, hydroxy lower cycloalkyl group, hydroxy lower cycloalkyloxy group, hydroxy cycloalkenyl group, halogenated hydroxy lower alkyl group, 4-hydroxypiperidyl group, 4-lower alkoxypiperidyl group, ω,ω -lower alkylene dioxyalkyl group, ω,ω -lower alkylene dioxy alkoxy group,

lower cycloalkyl hydroxy methyl group, aryloxy group, aryl aminosulfonyl group, amino group, lower alkyl amino group, di-lower alkyl amino group, hydroxy lower alkyl amino group, lower acyl amino group, hydroxy lower acyl amino group, lower alkyl sulfonyl amino group, pyridyl lower alkoxy group, lower alkyl pyridyl alkoxy group, lower alkoxy hydroxy alkoxy group, lower thioalkoxy alkoxy group, lower alkyl sulfonyl alkoxy group, N-lower alkyl carbamoyl group, N,N-di-lower alkyl carbamoyl group, N-hydroxy lower alkyl carbamoyl group, N-hydroxy lower alkyl-N-lower alkyl carbamoyl group, halogenated lower alkoxy group, cyano lower alkoxy group, hydroxy lower cycloalkoxy group, trifluoromethyl group, trifluoromethoxy group, amino lower alkoxy group, N-lower alkyl aminoalkoxy group, N,N-di-lower alkyl aminoalkoxy group, lower acyl alkoxy group, lower acyl aminoalkoxy group, (1,3-dioxolanyl) lower alkyl group, (1,3-dioxolanyl) lower alkoxy group, amide lower alkoxy group, 4-(hydroxy alkyl) tetrahydropyran-4-yl group, 2,3-dihydrobenzofuranyl group, 2-hydroxy-2-alkyl-2,3-dihydrobenzofuranyl group, indanonyl group, hydroxyindanyl group, imidazolyl lower alkoxy group, succimide group or 2-oxazolidone-3-yl group, optionally substituted benzoyloxy lower alkyl group, optionally substituted amino lower alkyl group, optionally substituted amino lower alkoxy group, optionally substituted aralkyloxy group, optionally substituted heteroaryl alkoxy group,

Y 1 optionally substituted morpholinyl lower alkoxy group, optionally substituted piperidyl lower alkoxy group, optionally substituted piperazinyl lower alkoxy group and optionally substituted pyrrolidinyl lower alkoxy group.

Please replace the paragraph on page 47, lines 7-11 with the paragraph below:

D 2 The reaction proceeds smoothly in the presence of a base. The base herein used includes, ~~but is not limited to,~~ potassium carbonate, sodium carbonate, sodium bicarbonate, sodium hydroxide, potassium hydroxide, triethylamine, pyridine, N, N-dimethyl aniline, etc.

Please replace the last paragraph on page 52 with the following paragraph:

D 3 The heterodiazinon compound (V) above encompasses compounds disclosed in the above-mentioned US-4,670,555 (US-4,782,066). Specifically, the heterodiazinon compound (V) includes, ~~but is not limited to,~~ the similar compound as described for the heterodiazinon compound (I).
